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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/617,625	07/10/2003	Ulug Bayazit	2102484-902002	4266
26379 7590 05/10/2007 DLA PIPER RUDNICK GRAY CARY US, LLP 2000 UNIVERSITY AVENUE E. PALO ALTO, CA 94303-2248			EXAMINER VO, TUNG T	
			ART UNIT 2621	PAPER NUMBER
			MAIL DATE 05/10/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/617,625

**Applicant(s)**

BAYAZIT, ULUG

**Examiner**

Tung Vo

**Art Unit**

2621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 17-22 is/are pending in the application.
- 4a) Of the above claim(s) 1-16 and 24-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>07/10/2003</u> | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Group I, claims 17-22, in the reply filed on 01/29/2007 is acknowledged. The traversal is on the ground(s) that the applicants oversight the claims 17-22 and 24-27 in both applications 10/617,625 and 10/168,344. This is not found persuasive because the restriction is required when there are two inventions in the application, the invention as claimed in group I (claims 17-22) is different from the invention as claimed in group II (claims 24-27) as set forth in the previous Office Action dated 01/16/20007. The requirement is still deemed proper and is therefore made FINAL.
2. The applicant selected group I, claims 17-22, for examination and canceled group II, claims 24-27. Therefore, non-elected claims 24-27 are withdrawn.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 17-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Park (US 5,416,604).

Re claims 17-22, Park discloses a signal coding apparatus (fig. 1), comprising:

(a) partitioning means (10 of fig. 1) for dividing a field of data into a plurality of data groups (macroblocks);

(b) transform means (50 of fig. 1) for encoding respective ones of said plurality of data groups, said data groups represented by respective transform coefficients;

(c) a quantizing means (60 of fig. 1) for compressing said respective transform coefficients representing said plurality of data groups;

(d) a compressing means (80 of fig. 1) for further compressing said quantized transform coefficients; and

(e) a rate control means (70 of fig. 1) for mapping each unique pair of a class of features of said groups of data (71 of fig. 1), and a quantization parameter (61 of fig. 1) to a unique estimate for a number of coding bits (75 of fig. 1); wherein said features of said groups of data comprises data indicating pixel luminance intensity values and corresponding pixel chrominance intensity values (10 of fig. 1); wherein said transform means (50 of fig. 1) comprises a two-dimensional orthogonal transform; wherein said compressing means comprises a run-length coder (82 of fig. 1) and a variable length coder (82 of fig. 1); wherein said orthogonal transform comprises a discrete cosine transform operating on one of the intensity values of the pixels of a group of data (50 of fig. 1), and the error of the temporal prediction from one or more temporally local groups of data (72 of fig. 1); wherein said quantizing means comprises a uniform scalar quantizer (40 and 62 of fig. 1).

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5. Claims 17-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Mita et al. (US 5,959,675).

Re claims 17-22, Mita discloses a signal coding apparatus (fig. 9), comprising:

(a) partitioning means (2 of fig. 9) for dividing a field of data into a plurality of data groups (macroblocks);

(b) transform means (3 of fig. 9) for encoding respective ones of said plurality of data groups, said data groups represented by respective transform coefficients;

(c) a quantizing means (5 of fig. 9) for compressing said respective transform coefficients representing said plurality of data groups;

(d) a compressing means (6 of fig. 9) for further compressing said quantized transform coefficients; and

(e) a rate control means (32 of fig. 9) for mapping each unique pair of a class of features of said groups of data (9 and 23 of fig. 9), and a quantization parameter (39 and 31 of fig. ) to a unique estimate for a number of coding bits (31 of fig. 9); wherein said features of said groups of data comprises data indicating pixel luminance intensity values and corresponding pixel chrominance intensity values (col. 3, lines 50-53, Note the L kinds of weights are applied to a luminance signal and a chrominance signal so that the two kinds of signals have different weighting characteristics); wherein said transform means (3 of fig. 1) comprises a two-dimensional orthogonal transform; wherein said compressing means comprises a run-length coder (Note the two-dimension Huffman coding utilizes a length of successive zeros (i.e., a zero run length) and the class data ) and a variable length coder (6 of fig. 1); wherein said orthogonal transform comprises a discrete cosine transform operating on one of the intensity values of the

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pixels of a group of data (3 of fig. 9), and the error of the temporal prediction from one or more temporally local groups of data (fig. 11, Note predicted error); wherein said quantizing means comprises a uniform scalar quantizer (30 of fig. 9).

6. Claims 17-19, and 21-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Krishnamurthy et al. (US 6,496,607)

Re claims 17-19, and 21-22, Krishnamurthy discloses a signal coding apparatus (fig. 1), comprising:

(a) partitioning means (120 and 121 of fig. 1) for dividing a field of data into a plurality of data groups (macroblocks);

(b) transform means (160 of fig. 1) for encoding respective ones of said plurality of data groups, said data groups represented by respective transform coefficients;

(c) a quantizing means (170 of fig. 1) for compressing said respective transform coefficients representing said plurality of data groups;

(d) a compressing means (180 of fig. 1) for further compressing said quantized transform coefficients; and

(e) a rate control means (130 of fig. 1) for mapping each unique pair of a class of features of said groups of data (122, 124, 124, and 127 of fig. 1), and a quantization parameter (col. 6, lines 45-62) to a unique estimate for a number of coding bits (130 of fig. 1); wherein said features of said groups of data comprises data indicating pixel luminance intensity values and corresponding pixel chrominance intensity values (112 of fig. 1); wherein said transform means (157 of fig. 1, DCT) comprises a two-dimensional orthogonal transform; wherein said orthogonal

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transform comprises a discrete cosine transform operating on one of the intensity values of the pixels of a group of data (157 of fig. 1), and the error of the temporal prediction from one or more temporally local groups of data (150 of fig. 1); wherein said quantizing means comprises a uniform scalar quantizer (130 of fig. 1, Note when intra frame is encoded).

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kato et al. (US 6,535,556 B1) discloses an apparatus and method for encoding images and medium in which image encoding program has been recorded.

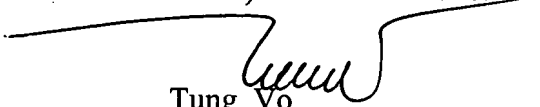
### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tung Vo whose telephone number is 571-272-7340. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Tung Vo  
Primary Examiner  
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